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POTOMAC PATENT GROUP PLLC  
P. O. BOX 270  
FREDERICKSBURG, VA 22404

EXAMINER
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WONG, WILLIAM

ART UNIT	PAPER NUMBER
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2178

NOTIFICATION DATE	DELIVERY MODE
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11/19/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

tammy@ppglaw.com

## Office Action Summary

Application No.

10/840,001

Applicant(s)

HUNLETH ET AL.

Examiner

William Wong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7,9,11-19,21-29 and 31-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,9,11-19,21-29 and 31-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This action is in response to the communication filed on August 8, 2007.

- Claims 1, 12, 13, 24, and 37-39 have been amended.
- Claims 8, 10, 20, and 30 have been cancelled.
- Claims 40-46 have been added.

Claims 1-7, 9, 11-19, 21-29, and 31-46 are pending and have been examined.

Previous objections to the specification have been withdrawn in view of amendments to the specification. Previous objections to the specification have been withdrawn in view of amendments to the claims. Previous 35 USC 112 rejections have been withdrawn in view of cancelled claim. Previous 35 USC 101 rejections are maintained.

### ***Priority***

1. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. However, it is noted that while most of the previously recited claims of the present application are entitled to the right of priority of the provisional application, most of the new claims are not, based upon comparison of their disclosures.

### ***Claim Objections***

2. As per claim 36, the phrase "length of said helical surface" is not defined by the claim, the specification does not provide a standard for ascertaining the

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length of a helical surface, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. In regards to the claim, the specification only states in paragraph 21 that "Since the outer helix 63 is longer than the inner helix 61, it will typically have a smaller helical angle than the inner helix 61". This is describing a relationship between two helices, not a property of an angle of one of the helices. There is no discussion on an angle being varied according to the length, nor how to ascertain the "length of said helical surface" (e.g. how to measure it). Appropriate correction is required.

3. As per claim 13 and 39, the claims are amended to include "and displaying said user interface". The claims are directed to a user interface comprising a surface, items, etc. (elements of the user interface), but the additional feature is a method step, which is not an element of the user interface. Furthermore, it is also unclear what is "displaying said user interface". As per claim 13, it appears that the clipping plane is possibly displaying the user interface, which would also raise enablement issues since the clipping plane is a part of the user interface and would also raise new matter issues. As per claim 39, it appears that the axis is possibly displaying the user interface, which would also raise enablement issues since the clipping plane is a part of the user interface and would also raise new matter issues. Possible corrections include replacing "displaying said user interface" with "instructions displaying said user interface".

***Claim Rejections - 35 USC § 101***

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4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 13-19, 21-24, 31-36, and 39 are rejected under 35 U.S.C. 101

because the claimed invention is directed to non-statutory subject matter.

As per claims 13-19, 21-24, 31-36 and 39, the claims are directed to a user interface comprising a surface, items, labels, means for selecting, and a plane, which is neither a process, machine, manufacture, or composition of matter. As claimed, the user interface possibly constitutes a computer program, which is still nonstatutory unless embodied on a computer-readable medium and combined with functional descriptive material. See MPEP 2106 for more details.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 37-39 are rejected under 35 U.S.C. 102(e) as being anticipated by

Robbins (US 2002/0126121 A1).

As per independent claim 37, Robbins teaches a **computer-readable medium containing a program that performs the steps of** (e.g. in paragraph 83): **displaying a helical surface having an axis** (e.g. in paragraph 7 and figures 3-21); **providing a plurality of items on said helical surface** (e.g. in paragraph 7); **providing a plurality of category labels along said helical surface** (e.g. in paragraphs 68 and 79); **selecting one of said plurality of items** (e.g. in paragraphs 7 and 9); **and clipping from view items on said helical surface which are above a clipping plane** (e.g. in paragraph 50, items above the area which defines the center-of-interest are clipped from view until brought into the center-of-interest by user input, and paragraph 81 with figure 21).

As per independent claim 38, Robbins teaches a **method for item selection comprising the steps of: displaying a helical surface having an axis** (e.g. in paragraph 7 and figures 3-21); **providing a plurality of items on said helical surface** (e.g. in paragraph 7); **providing a plurality of category labels along said helical surface** (e.g. in paragraphs 68 and 79); **selecting one of said plurality of items** (e.g. in paragraphs 7 and 9); **and wherein said axis is substantially parallel to a plane associated with a screen on which said helical surface is displayed** (e.g. in figures 3-6 and 10-21).

As per independent claim 39, Robbins teaches a **user interface executable on a computer-readable medium** (e.g. in abstract and paragraph 83), **said user interface comprising: a helical surface having an axis** (e.g. in paragraph 7 and figures 3-21); **a plurality of items displayed on said helical**

**surface** (e.g. in paragraph 7); **providing a plurality of category labels along said helical surface** (e.g. in paragraphs 68 and 79); **means for selecting one of said plurality of items** (e.g. in paragraphs 55, 89, 7 and 9); **wherein said axis is substantially parallel to a plane associated with a screen on which said helical surface is displayed** (e.g. in figures 3-6 and 10-21); and **displaying said user interface** (e.g. in paragraph 38).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-4, 6-7, 9, 11-16, 18-19, 21-29, and 31-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robbins (US 2002/0126121 A1) in view of Asami (US 2002/0054158 A1).

As per independent claim 1, Robbins teaches a **method for item selection comprising the steps of: displaying a helical surface having an axis** (e.g. in paragraph 7 and figures 3-21); **providing a plurality of items on said helical surface** (e.g. in paragraph 7); and **selecting one of said plurality of items** (e.g. in paragraphs 7 and 9); and **clipping from view items on said helical surface which are above a clipping plane** (e.g. in paragraph 50, items above the area which defines the center-of-interest are clipped from view until

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brought into the center-of-interest by user input, and paragraph 81 with figure 21), but Robbins does not specifically teach **displaying a plurality of category labels along said helical surface which identify groups of said plurality of items**. However, Asami teaches displaying a plurality of category labels along a spiral menu (note that a helix is synonymous to a spiral) that identify groups of items on the menu (e.g. in figures 47-49 and 51-52). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the helical surface of Robbins with the category labels of Asami in order to provide contextual information to the user to aid in navigating the menu and increase organization.

As per claim 2, the rejection of claim 1 is incorporated and Robbins further teaches **wherein said plurality of items includes at least one of: media items, software applications and features associated with a software application** (e.g. in paragraph 9 and 11).

As per claim 3, the rejection of claim 1 is incorporated and Robbins further teaches **wherein said step of displaying a helical surface further comprises the step of: displaying said helical surface with said axis oriented substantially perpendicular to a plane associated with a display screen** (e.g. in paragraph 54 and figures 7 and 9).

As per claim 4, the rejection of claim 3 is incorporated, but Robbins does not specifically teach **tilting said axis of said helical surface by a predetermined tilt angle relative to perpendicular to said plane associated with said display screen**. However, Asami teaches tilting an axis of a helical



surface by a predetermined tilt angle relative to a perpendicular to a plane associated with a display screen (e.g. in paragraphs 304-305). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Robbins with the teaching of Asami in order to provide the user with a view of the menu showing more items and the general shape of the menu.

As per claim 6, the rejection of claim 1 is incorporated and Robbins further teaches **wherein said step of providing a plurality of items on said helical surface further comprises the step of: allocating a portion of said helical surface to each of said plurality of items** (e.g. in paragraph 7).

As per claim 7, the rejection of claim 6 is incorporated and Robbins further teaches **wherein said portion is wedge-shaped** (e.g. in figure 3).

As per claim 9, the rejection of claim 1 is incorporated and Robbins further teaches **wherein said step of displaying further comprises the step of: displaying said helical surface with said axis oriented substantially parallel to a plane associated with a display screen** (e.g. in figures 3-6 and 10-21).

As per claim 11, the rejection of claim 3 is incorporated and Robbins teaches **a view of said helical surface such that it is displayed with said axis oriented substantially parallel to said plane associated with said display screen** (e.g. in figures 3-6 and 10-21) and **changing** from having the axis *substantially parallel to said plane to substantially perpendicular to said plane* (e.g. in paragraph 54 and figures 6-7), but does not specifically teach changing to

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the substantially parallel view. However, Asami teaches a special command which restores a specific camera position (e.g. in paragraph 313). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Robbins with the teaching of Asami in order to allow the user to easily return to the parallel view.

As per claim 12, the rejection of claim 1 is incorporated and Robbins further teaches **scrolling through said plurality of items using a free space pointing device** (e.g. in paragraphs 55 and 89).

As per claim 25, the rejection of claim 1 is incorporated and Robbins further teaches **wherein said helical surface comprises an outer helix, an inner helix and a surface therebetween** (e.g. in figures 3-21).

As per claim 26, the rejection of claim 25 is incorporated and Robbins further teaches **wherein said outer helix has a first helical angle associated therewith and said inner helix has a second helical angle associated therewith, said first helical angle being different from said second helical angle** (e.g. in figures 3-6 and 10-21).

As per claim 27, the rejection of claim 25 is incorporated and Robbins further teaches **wherein said surface is at least partially translucent or transparent** (e.g. in paragraph 80).

As per claim 28, the rejection of claim 1 is incorporated and Robbins further teaches **wherein said axis is linear** (e.g. in figures 3-21).

As per claim 29, the combination of Robbins and Asami teaches the method of claim 11, and both Robbins and Asami further teach **animating the**

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**transition** between views (Robbins, in paragraph 54 and 56; Asami, in paragraph 313).

Claims 13-16, 18-19, 21-24, and 31-35 are the user interface claims corresponding to the method claims 1-4, 6-7, 9, 11-12, and 25-29, and are rejected under the same reasons set forth in connection with the rejection of claims 1-4, 6-7, 9, 11-12, and 25-29. Robbins further teaches the means for performing the method (e.g. in paragraphs 55, 83, and 89).

As per claim 36, as best understood by examiner, the rejection of claim 31 is incorporated and Robbins further teaches **wherein said outer helix and said inner helix have at least one helical angle associated there with which varies as a function of length of said helical surface** (e.g. in figures 3-6 and 10-21).

10. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robbins (US 2002/0126121 A1) in view of Asami (US 2002/0054158 A1), and further in view of Sloo et al. (US 2003/0218637 A1).

As per claim 40, the rejection of claim 1 is incorporated and Robbins teaches **wherein said step of displaying further comprises the step of: displaying said helical surface having an axis** (e.g. in paragraph 7 and figures 3-21), but does not specifically teach **wherein said axis is circular and provides a wrap-around effect between ends of said helical surface**.

However, Sloo teaches a circular property providing a wrap around effect to a menu (e.g. in claim 28). It would have been obvious to one of ordinary skill in the

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art at the time of invention to modify the axis of Robbins to be circular for the purpose of allowing the user to be able to easily view one end of the helical menu from viewing the other end, where more items are contained in the menu than can be viewed at one time (Sloo, in claim 28).

11. Claims 41 and 43-46 rejected under 35 U.S.C. 103(a) as being unpatentable over Robbins (US 2002/0126121 A1) in view of Asami (US 2002/0054158 A1) and Cole (US 6,005,578).

As per independent claim 41, Robbins teaches a **method for item selection within a graphical user interface (GUI) comprising the steps of: displaying a helical surface having an axis** (e.g. in paragraph 7 and figures 3-21); **providing a plurality of items on said helical surface** (e.g. in paragraph 7); **and selecting one of said plurality of items** (e.g. in paragraphs 7 and 9); **selecting with a free space pointer one of said plurality of items** (e.g. in paragraphs 42, 55, and 89); **clipping from view items on said helical surface which are above a clipping plane** (e.g. in paragraph 50, items above the area which defines the center-of-interest are clipped from view until brought into the center-of-interest by user input, and paragraph 81 with figure 21) **and displaying said user interface** (e.g. in paragraph 38), but Robbins does not specifically teach **displaying a plurality of category labels along said helical surface which identify groups of said plurality of items, wherein said plurality of items represent movies, and navigating said plurality of category labels through performing a screw turn motion with said helical surface**. However,

Asami teaches displaying a plurality of category labels along a spiral menu (note that a helix is synonymous to a spiral) that identify groups of items on the menu (e.g. in figures 47-49 and 51-52). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the helical surface of Robbins with the category labels of Asami in order to provide contextual information to the user to aid in navigating the menu and increase organization.

Asami further teaches allowing the user to navigate the menu by rotating the menu, which would perform a screw turn motion since the menu is helical (e.g. in paragraphs 194, 305, 307, 309, and 350). It would have been obvious to one of ordinary skill in the art at the time of invention to modify the menu of Robbins and Asami to include the rotating of Asami for the purpose of providing the user with increased control of the menu. Cole teaches a menu of items representing movies (e.g. in column 2 lines 12-16). It would have been obvious to one of ordinary skill in the art at the time of invention to modify the menu of Robbins and Asami to include the movie items of Cole for the purpose of organizing movies.

As per claim 43, the rejection of claim 41 is incorporated and Robbins further teaches **displaying at least two helical menus** (e.g. in figure 9).

As per claim 44, the rejection of claim 41 is incorporated and Robbins further teaches **slicing said helical surface with a moveable marking plane** (e.g. in figures 13, 17, and 21).

As per claim 45, the rejection of claim 41 is incorporated, but Robbins does not specifically teach **displaying a background for the GUI upon which said helical surface is displayed**. However, Asami teaches the above

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limitation (e.g. in paragraphs 312 and 335). It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Robbins to include the background of Asami for the purpose of visual appeasement.

As per claim 46, the rejection of claim 41 is incorporated and Robbins further teaches **using a gesture with said free space pointer to select one of said plurality of items** (e.g. in paragraphs 42, 55, and 89).

12. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robbins (US 2002/0126121 A1) in view of Asami (US 2002/0054158 A1) and Cole (US 6,005,578), and further in view of Sloo et al. (US 2003/0218637 A1).

As per claim 42, the rejection of claim 41 is incorporated and Robbins teaches **wherein said step of displaying further comprises the step of: displaying said helical surface having an axis** (e.g. in paragraph 7 and figures 3-21), but does not specifically teach **wherein said axis is circular and provides a wrap-around effect between ends of said helical surface**.

However, Sloo teaches a circular property providing a wrap around effect to a menu (e.g. in claim 28). It would have been obvious to one of ordinary skill in the art at the time of invention to modify the axis of Robbins to be circular for the purpose of allowing the user to be able to easily view one end of the helical menu from viewing the other end, where more items are contained in the menu than can be viewed at one time (Sloo, in claim 28).

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13. Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robbins (US 2002/0126121 A1) in view of Asami (US 2002/0054158 A1) as applied to claim 4 above, and further in view of Matsuda (US 6,346,956 B2).

As per claim 5, the combination of Robbins and Asami teaches the method of claim 4, but does not specifically teach **wherein said predetermined tilt angle is within the range of 30-60 degrees**. However, Matsuda teaches a predetermined tilt angle with the range of 30-60 degrees (e.g. in column 33 lines 29-31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tilt angle in such a manner in order to provide the user with a view of the menu showing more items and the general shape of the menu.

Claim 17 is the user interface claim corresponding to the method claim 5, and is rejected under the same reasons set forth in connection with the rejection of claim 5. Robbins further teaches the means for performing the method (e.g. in paragraphs 55, 83, and 89).

### ***Response to Arguments***

14. Applicant's arguments filed August 8, 2007 have been fully considered but they are not persuasive.

Applicant argues, in substance, that the combination of Robbins and Asami would not encompass the claimed invention and that there is no

motivation to combine Robbins and Asami. However, examiner respectfully disagrees.

The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The test for obviousness is not whether the features of a reference may be bodily incorporated into the structure of another reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In this case, Robbins teaches creating a menu by displaying a plurality of items on a helical surface. It was well known in the art to display labels along a helical menu to represent a group of items on the menu, as shown by Asami. One of ordinary skill in the art at the time of invention would have therefore recognized the benefit of including such a feature. Such labels, for example, help to increase the organization of the menu, allowing the user the ability to more easily locate a desired item for selection, thus help the user better navigate the menu. Therefore, it would have been obvious to one of ordinary skill in the



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art at the time of invention to include the labels of Asami along the helical surface of Robbins.

In regards to the "free space" pointer and the newly submitted claims, see the above rejections.

### ***Conclusion***

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Wong whose telephone number is 571-270-1399. The examiner can normally be reached on M-F 7:30-5:00 EST with every other Friday 7:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on 571-272-4124. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William Wong/

  
STEPHEN HONG  
SUPERVISORY PATENT EXAMINER